

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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CERTIFIED MAIL RETURN RECEIPT REQUESTED

September 7, 2006

Anne Bartosewicz Project Director Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270

RE: **DOCKET NO. 272** - The Connecticut Light and Power Company and The United Illuminating Company Certificate of Environmental Compatibility and Public Need for the Construction of a New 345-kV Electric Transmission Line and Associated Facilities Between Scovill Rock Switching Station in Middletown and Norwalk Substation in Norwalk, Connecticut Including the Reconstruction of Portions of Existing 115-kV and 345-kV Electric Transmission Lines, the Construction of the Beseck Switching Station in Wallingford, East Devon Substation in Milford, and Singer Substation in Bridgeport, Modifications at Scovill Rock Switching Station and Norwalk Substation and the Reconfiguration of Certain Interconnections. <u>Development and Management (D&M) Plan for Segment 1b – Royal Oak Bypass in the Middletown and Middlefield.</u>

Dear Ms. Bartosewicz:

At a public meeting held on August 31, 2006, the Connecticut Siting Council (Council) considered and conditionally approved the Development and Management (D&M) Plan for Segment 1b – Royal Oak Bypass in the Middletown and Middlefield with the following conditions:

- o That CL&P provide two weeks advance notice prior to commencement of construction to the Council, and the municipalities and landowners adjacent to the rights-of way not less than two weeks prior to the initiation of construction.
- That CL&P provide quarterly construction reports noting milestones of construction activity, including spill reports.
- o That CL&P provide a weekly Environmental Inspector's report.
- That the location of the contractor's yards and staging areas be identified and provided to the Council prior to use.
- That a soil management plan be provided prior to commencement of construction.
- That lay down or pulling station sites be provided prior to commencement of construction and such locations not be located within 50 feet of the edge of a wetland or water body.
- o That CL&P utilize a professional forester to oversee clearing activities consistent with forestry BMP.



Docket No. 272 D&M Plan Segment 1b Decision Page 2

- o That best management practices for fueling, operation, and maintenance of vehicles in aquifer zones and inland wetland and watercourses be employed.
- That CL&P provide an annual report for three years following ROW construction on the reestablishment of native vegetation to inland wetland and the control and management of invasive plant species.
- That clearing and installation of structures be conducted during periods of low flow or during winter months, to the extent practicable, and that temporary construction mats and associated material used throughout Segment 1b be removed upon completion of construction.
- o That CL&P comply with construction and post-construction schedule crossing Middletown Water Company land including amendments identified in the staff report.
- o That CL&P notify the Council of workday and/or work hour extensions verbally and documented within 24 hours of a business day.
- o That CL&P provide a blasting plan, if necessary, for review and approval prior to blasting.
- That the D&M plans for erosion and sediment controls comply with the <u>2002</u> Connecticut Guidelines for Erosion and Sediment Control.
- o That CL&P provide archeological reconnaissance surveys for review and approval.
- That proposed deviations are authorized by the Chairman with written specification of the deviation submitted within 24 hours of a business day and all other changes require advance notification and Council approval or be subject to enforcement by the Attorney General.

This approval applies only to the D&M Plan submitted on June 16, 2006. Enclosed for your information is the staff report dated August 31, 2006.

Any deviation from the D&M plans may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Please feel free to call S. Derek Phelps, Executive Director if you have any questions.

Vice Chairman

CCT/SDP/foc

Enclosure

c: Council Members
Parties and Intervenors

Docket No. 272
Connecticut Light and Power Company
Segment 1b
Royal Oak Bypass
Middletown and Middlefield
Staff Report - August 31, 2006

Introduction

On June 16, 2006 Connecticut Light and Power Company (CL&P) submitted a Development and Management (D&M) Plan for a 345-kV overhead transmission line in Segment 1b – Royal Oak Bypass in the Middletown and Middlefield.

CL&P consulted with officials of Middletown, and Middlefield. Commonwealth Associates, an independent Technical Advisor selected after consultation with Connecticut's Office of Consumer Counsel, was available to assist residents and municipal officials with their requests. Furthermore, the Certificate Holder provided copies of the D&M Plan to the Acorn Drive Residents and the Town of Durham.

Pursuant to Connecticut General Statutes §16-243, CL&P must file a *Method and Manner of Construction* with the Connecticut Department of Public Utility Control and associated Department regulations. The Project is also subject to a permit from the U.S. Army Corps of Engineers.

Project Administration

Project administration is overseen by CL&P. CL&P's construction contractor will establish a contractor's yard for office trailers, staging of equipment, materials and supplies, and a parking area for construction workers. This contractor's yard will be about two to five acres in size and located proximal to the project. Where possible, material storage, staging and lay down areas will be set up on property already owned by NU. If NU property is not available, areas such as parking lots or land that is not in use as identified in Volume 1, Section K (Proposed Construction Areas) of the Docket No.272 Certificate application would be used (i.e. two locations in Middletown and six locations in Wallingford). Council staff recommends that the contractor's yards and staging areas be identified and provided to the Council prior to use.

Transmission Line Route

The D&M Plan and alignment map (at a scale of 1" = 200"), including right-of-way and structure profiles, outlines the route of a new overhead 345-kV transmission line.

Segment 1b consists of a 1.2-mile overhead segment of the proposed 345-kV overhead transmission line that will be routed away from an existing CL&P 115-kV line corridor and onto a bypass around the Royal Oak Subdivision (Royal Oak). This segment of the new 345-kV line is routed through the towns of Middletown (0.7 miles) and Middlefield (0.5 miles), as shown on

Figure 2-1, Key Map. This segment of new 345-kV line right-of-way (ROW) begins at a location within the existing 115-kV right-of-way (ROW) that is approximately 1000 feet east from the end of Holly Lane near the Durham-Middletown town line. The bypass angles northwest around the north side of Royal Oak through the City of Middletown, across South Main Street (Route 17) into the Town of Middlefield, and then turns south to rejoin the existing ROW just inside the Durham town line and approximately 400 feet west of Royal Oak Drive and Route 17 intersection. The new 345-kV line will be supported on delta-configured steel monopole structures with a typical height of 85 feet. This segment will require a new 125-foot wide right-of-way.

Design Considerations

No comments were received regarding the Royal Oak Bypass design.

Construction Process

The D&M Plan specifically outlines the methods of construction and guidelines for clearing, (permanent and temporary) access roads, foundation excavation, soil erosion and sedimentation control, dewatering, spoil placement, and restoration of disturbed areas to preconstruction conditions. Blasting is not expected however if blasting is necessary CL&P would submit a Blasting plan to the Council for review and approval.

Special procedures have been developed for stream and inland wetland crossings, electric utility crossings, noise sensitive receptors, fugitive particulate emissions, dust and mud control, management of solid and/or hazardous substances, protection of cultural and historic resources including an unanticipated discoveries plan, visual impact and residential mitigation plan, and worksite safety plan.

Clearing

Clearing will occur along the majority of Segment 2b. Vegetation clearing practices to be used are consistent with NU's Design and Application Standard titled "Right-of-Way Vegetation Clearing Standard for 69-kV through 345-kV Transmission Lines" (TRM 81.021), the New England Independent System Operator's Vegetation Clearing Standard OP-4, and the National Electrical Safety Code Rule 218 as adopted by the Connecticut Department of Public Utility Control (Regulation Section 16-11-134).

The D&M Plan ROW profiles do not demarcate specific clearing to construct the 345-kV line and reconstruct the 115-kV line because much of the ROW had been maintained from edge to edge. CL&P had been maintaining the ROW consistent with its vegetative maintenance program on four year cycles. As the Middletown-Norwalk Project was being planned vegetative maintenance was postponed and would be scheduled to take place during construction of the Middletown-Norwalk Project. Thus adjacent residents become accustom to growing vegetation within the ROW easement.

The construction clearing practices include retention of a 50-foot buffer near intermittent streams and wetlands and a 100 foot buffer near perennial streams. Also, a 40-foot cleared area is needed from all surfaces of structures. Lay down and assembly of structures would require larger cleared areas.

A professional forester will oversee tree inventory and clearing activities. Low-impact tree clearing is the preferred method for clearing which incorporates a variety of approaches,

techniques and equipment to minimize site disturbance and to protect residual forests, wetlands, watercourses, soils and cultural resources, including stone walls, old cemeteries and old foundations that are commonly found in wooded areas in Connecticut. Primarily, CL&P would follow the Best Management Practices (BMP) for harvesting as outlined in *Logging and Water Quality in Connecticut* – developed by the Connecticut 208 Forestry Advisory Committee, 1982. Council staff recommends CL&P utilize a professional forester to oversee clearing activities consistent with BMP.

Soil Management

A soil management plan will be issued for handling spoil material removed during excavation. Council staff recommends a soil management plan be provided prior to commencement of construction.

Construction Methods

Construction of the overhead transmission lines requires construction of (permanent and temporary access roads both to widths of 15 feet. CL&P would install crushed stone, gravel and or timber mat as a base for access roads. Steel poles ranging in height from 75 feet to 120 feet would require reinforced concrete foundations ranging from 7 feet to 8 feet in diameter. While the project would use an extensive amount of concrete, it is made of naturally-occurring substances. Mostly calcium from within the concrete materializes on the surface the concrete. However, soils with sulfites would require a particular concrete mixture to mitigate molecular interaction. This would be denoted within soil boring logs and CL&P would order such concrete.

Structure and foundation construction would require a 25-foot cleared area to drill foundation holes in to the ground or into rock. Excavated material would be used to improve grade around the structures in upland areas; to improve designated construction access roads; and/or deposited as directed by the landowner but not in a wetland.

Soil excavated in wetlands would be stored in upland areas reserved for wetlands restoration. Other excess material would be removed and disposed in accordance with state and/or federal regulations.

Excavations may require dewatering as a result of storm water or groundwater. Dewatering shall consist of a 10 ft by 10 ft straw bale perimeter (size adjusted per water volume) be located on a fairly level upland that is well vegetated, to allow water to drain and not to discharge into a wetland or water body. Groundwater encountered during the installation of structure foundations will be discharged in accordance with the Department of Environmental Protection (DEP) General Permit for Storm water and Dewatering Wastewaters from Construction.

No lay down or pulling station sites have been identified and Council staff would recommend such locations not be located within 50 feet of the edge of a wetland or water body and be provided prior to commencement of construction.

Erosion/Sedimentation/Revegetation

CL&P developed a soil erosion/sedimentation control and revegetation plan and procedures regarding access road development, erosion control and minimization of effects on natural systems incidental to construction. Council staff recommends that the erosion and

sediment controls comply with the <u>2002 Connecticut Guidelines for Erosion and Sediment Control</u>.

Also, CL&P developed a wetland vegetation monitoring and maintenance plan and invasive species control and management plan. Council staff recommends an annual report for three years following ROW construction on the reestablishment of native vegetation to inland wetland and the control and management of invasive plant species.

Water crossing

Water crossing methods that may be used during construction include flume pipe with crushed rock ramp, temporary bridge, construction mats and stone fords. Typically work in these resource areas are done during periods of low flow which occur in the summer months of June through September and the winter months of January through March. These gaps are identified on the drawings as "Restricted Access."

Access roads approaching structures 24530, 200 feet from the south, and 24531, 400 feet from the north, requires permanent fill in wetlands in the Town of Middlefield. Also, a gap has been designed between these structures to provide additional protection to water and/or wetland crossings. Construction mats will be used for the portions of the access road in other wetlands. Construction mats will also be used to provide a work platform at structure installation sites in wetlands. Council staff recommends clearing and installation of structures be conducted during periods of low flow or during winter months, to the extent practicable, and that temporary construction mats and associated material used throughout Segment 1b be removed upon completion of construction.

Environment/Cultural/Recreation

The City of Middletown owns a portion of the land traversed by the ROW. Since the Council did not order CL&P to prepare a Connecticut Department of Public Health (DPH) Change-in-Use Permit application for this watershed property; CL&P has developed construction and post-construction schedule (see Appendix D in the D&M Plan) consistent with DPH protocol. Council staff recommends CL&P comply with such schedules with the following amendments in language:

Schedule I

No. 1 - Prior to the commencement of construction on Middletown Water Company property, a spill prevention and an emergency spill response plan shall be developed by Northeast Utilities (NU) and shall be made available to NU's project engineers and job site supervisors. Said plans shall be submitted to the Connecticut Siting Council for review and approval prior to the commencement of any construction on Middletown Water Company property.

No. 5 - NU shall provide onsite inspection to assure that the water company land conditions contained in the Segment 1b D&M Plan are satisfied. As the CSC requires by its own determination or upon information provided by the City of Middletown, the project area will be inspected by the CSC's independent environmental inspector. The

environmental inspector will file written reports weekly with the CSC. These reports will be provided to the City of Middletown.

Schedule II

No. 2 - NU shall prohibit the use or storage of any chemical that has a water quality health based standard or maximum contaminant level. Chemical herbicide use is prohibited. Mechanical means shall be normally used in vegetation management within the transmission rights of way.

The Certificate Holder shall provide a copy to the water department of the City of Middletown of any document filings submitted to the State of Connecticut Department of Public Health.

Refueling in aquifer protection zones will be performed using portable spill containment areas. Council staff recommends that best management practices for fueling, operation, and maintenance of vehicles in aquifer zones and inland wetland and watercourses be employed.

The State Historic Preservation Office (SHPO) identified the proposed new ROW as being "sensitive" with a high probability of encountering unknown resources. Rock walls would also fall in a category of having historic significance. Presently, an archeological reconnaissance Phase II survey is still being conducted. Council staff recommends that such surveys be submitted for review and approval.

There are no recreation areas in or along Segment 1b.

No endangered, threatened, or species of special concern occur in Segment 1b.

Spill Prevention and Response

A Spill Prevention and Response Plan address actions used to prevent spills in addition to actions that shall be taken should any spills occur including emergency notification procedures. The on-site Environmental Inspectors are responsible for ensuring that contractors implement and maintain spill control measures. All fuel, oil, and hazardous materials management will be in accordance with local, state and federal guidelines. Council staff recommends CL&P attach copies of spill reports with its construction progress report.

Work safety

CL&P provided a copy of the Project Safety and Health Program. Prior to commencement of construction CL&P requires that all personnel (CL&P and Contractor) involved in construction activities attend a project-specific safety and environmental training session. These training sessions summarize the D&M Plan and other permit/certificate requirements governing the project. The training will emphasize the importance of workplace safety and environmental compliance including disciplinary action. Furthermore, an environmental inspector, the BSC Group previously recognized by the Council will be responsible for inspections and weekly reporting to verify that the construction is performed in accordance with environmental requirements.

Construction Schedule

The construction and installation of Segment 2b, from survey to energizing, will take approximately 27 months. The schedule is currently under review and subject to modifications. Construction activities are expected to take place during six 10-hour days per week, with additional time if necessary. Extensions of the workday and hours may occur on a temporary and case-by-case basis. Council staff recommends that CL&P notify the Council of workday and/or work hour extensions verbally and documented within 24 hours of a business day.

The following items summarize the projected schedule:

Survey February 2006 – August 2006 Geotech testing July 2006 – September 2006 Right-of-way clearing January 2007 – February 2007 Mobilization March 2008 Structure Removal Not Applicable Structures/Cable installation March 2008 – May 2008 Cut-overs October 2008 Site Restoration May 2008 – June 2008.

D&M Plan Changes

CL&P proposes the following procedures to address deviations of the D&M Plan:

- For proposed deviations prior to the start of construction or well in advance of commencement of specified activity, CL&P will submit a request in writing for review and approval by the Council;
- For proposed deviations during construction based upon field conditions, CL&P will conduct a telephone conference with Council staff to present the proposed modification and receive verbal approval from the Council Chairman with written specification of the deviation to be submitted within 24 hours after the request; and
- Implementation of deviations to the D&M Plan that are approved by the Council will be documented within the monthly monitoring reports to be submitted by the independent environmental inspector.

Council staff recommends that proposed deviations be authorized by the Chairman with written specification of the deviation submitted within 24 hours of a business day after the request and all other changes require advance notification and Council approval or be subject to enforcement by the Attorney General.

Notifications and Reporting

CL&P will notify municipalities and landowners adjacent to the rights-of way not less than two weeks prior to the initiation of construction. A toll-free number, staffed during working hours and voicemail other hours, will be available specific to the project. All calls will be documented which will initiate a protocol of response. Council staff recommends CL&P provide two weeks advance notice prior to commencement of construction to the Council, and the

municipalities and landowners adjacent to the rights-of way not less than two weeks prior to the initiation of construction.

CL&P proposed to provide monthly construction reports however the Environmental Inspector for the Council would provide weekly reports. Council staff recommends that CL&P provide quarterly construction reports noting milestones of construction activity.

Recommendations

To summarize, the Council staff recommends approval of the Segment 1b D&M Plan as follows:

That CL&P provide two weeks advance notice prior to commencement of construction to the Council, and the municipalities and landowners adjacent to the rights-of way not less than two weeks prior to the initiation of construction.

That CL&P provide quarterly construction reports noting milestones of construction activity, including spill reports.

That CL&P provide a weekly Environmental Inspector's report.

That the location of the contractor's yards and staging areas be identified and provided to the Council prior to use.

That a soil management plan be provided prior to commencement of construction.

That lay down or pulling station sites be provided prior to commencement of construction and such locations not be located within 50 feet of the edge of a wetland or water body.

That CL&P utilize a professional forester to oversee clearing activities consistent with forestry BMP.

That best management practices for fueling, operation, and maintenance of vehicles in aquifer zones and inland wetland and watercourses be employed.

That CL&P provide an annual report for three years following ROW construction on the reestablishment of native vegetation to inland wetland and the control and management of invasive plant species.

That clearing and installation of structures be conducted during periods of low flow or during winter months, to the extent practicable, and that temporary construction mats and associated material used throughout Segment 1b be removed upon completion of construction.

That CL&P comply with construction and post-construction schedule crossing Middletown Water Company land including amendments identified in the staff report.

That CL&P notify the Council of workday and/or work hour extensions verbally and documented within 24 hours of a business day.

That CL&P provide a blasting plan, if necessary, for review and approval prior to blasting.

That the D&M plans for erosion and sediment controls comply with the <u>2002</u> Connecticut Guidelines for Erosion and Sediment Control.

That CL&P provide archeological reconnaissance surveys for review and approval.

That proposed deviations are authorized by the Chairman with written specification of the deviation submitted within 24 hours of a business day and all other changes require advance notification and Council approval or be subject to enforcement by the Attorney General.



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NOTICE OF SERVICE

I hereby affirm that a photocopy of this document was sent to each Party and Intervenor on the service list dated September 6, 2006.

Dated: September 7, 2006

Lisa Fontaine

Custodian of Docket No. 272

